April 25, 1983

Dear Manufacturer: CD-83-6 (LD)

Subject: Utilization of Federal Durability-Data Vehicles to Satisfy State of California Testing Requirements

The enclosed letter to American Honda Motors (Honda) reflects a recent decision by the Certification Division concerning the use of Federal durability-data vehicles to satisfy California testing requirements (a copy of Honda's letter is also enclosed). Specifically, Honda asked if they could reconfigure durability-data vehicles with California intent evaporative emission control hardware, thereby saving the additional cost of building a vehicle only to meet the California evaporative emission test requirements. We have approved the Honda request under the provision of 40 CFR 86.084-26(a)(10).

Further details can be found in the enclosed documents. If you have any questions regarding this decision, please contact your respective certification team representative.

Sincerely yours,

Robert E. Maxwell, Director
Certification Division
Office of Mobile Sources

Enclosures

April 25, 1983

Mr. Brian Gill, Manager
Certification Department
American Honda Motors Company, Inc.
100 West Alondra Blvd.
Gardena, CA 90247

Dear Mr. Gill:

We have studied your proposal to realize certification cost reductions through the effective utilization of Federal durability-data vehicles to satisfy additional State of California testing requirements as further explained in your letter of March 28, 1983. As we understand your proposal, Honda could eliminate one test vehicle for each evaporative emission family at a substantial savings. Therefore, EPA grants you the special permission to carry out the evaporative testing of bench aged components on Federal durability-data vehicles for the purpose of deterioration factor calculations in accordance with applicable California evaporative test procedures. The California required component testing would be carried out at approximately 4,000 miles and again at 50,000 miles.

I have determined that such additional testing may be authorized as provided for under 40 CFR 86.084-26(a)(10). In my letter of January 11, 1982 to the industry on the subject of Durability-Data Vehicle Reconfiguration, I have already explained our policy concerning the reconfiguring of durability-data vehicles to serve the function of multiple purpose testing. This policy can be extended to cover the specific procedures Honda proposed. Accordingly, I have determined that your proposal has merit and essentially is in agreement with our liberalized stated policy concerning durability-data vehicles. Therefore, I approve your proposal under the provision of 40 CFR 86.084-26(a)(10) and the following terms and conditions:

1. The evaporative California hardware testing must be completed prior to the official EPA test at 5,000 miles and

after the official EPA test at 50,000 miles.

2. The vehicle must be reconfigured to its original build status with the originally installed parts reinstalled after the initial California hardware testing has been completed. All test data generated from such additional testing prior to the official EPA test at 50,000 miles is subject to standard EPA specified recordkeeping requirements and must be made available on request but is not required to be submitted to the EPA data base routinely.

Because the issue discussed may be of significance not only for Honda but the other automobile manufacturers as well, I plan to release your letter together with my response to the remainder of the industry to make them aware of the potential for significant cost-savings based on our liberalized policy.

Sincerely yours,

Robert E. Maxwell, Director
Certification Division
Office of Mobile Sources

AMERICAN HONDA MOTOR CO., INC.

P.O. BOX 50 --100 W. ALONDRA BLVD., GARDENA, CALIF. 90247
CABLE ADDRESS --AMEHON, GARDENA, CALIF. (213) 327--8280

March 28, 1983

Director
Certification Divislon (EPA-335)
Mobile Source Air Pollution Control
U.S. ENVIRONMENTAL PROTECTION AGENCY
2565 Plymouth Road
Ann Arbor, MI 48105

ATTENTION: Mr. B. Patok, Team Leader
Automobile Certification L.D.V.

Dear Sir:

This is to request your approval of our proposal described below. If accepted by the EPA this idea will significantly reduce the cost of certification testing for evaporative emissions without reducing the stringency of control. The saving would be accomplished by eliminating the special stabilized test vehicle upon which bench test components are tested.

In order to comply with the CARB regulation for. the determination of the evaporative emission control system deterioration factor (EECDF) Honda presently builds a vehicle of the appropriate type for each evaporative emission family. This vehicle is treated by storing or by baking to stabilize background evaporative emissions and mileage is accumulated on the drivetrain in order to stabilize exhaust emissions.

Three sets of evaporative emission control components are prepared and treated according to the CARB bench test regulation. Each set is then installed in succession on the test vehicle at the equivalent of 4,000 miles and 50,000 miles and the vehicle is subjected to exhaust emission and SHED tests.

We estimate that the cost of building each test vehicle, at the point in our development schedule for production when testing to determine the EECDF must begin, is approximately Our proposal which would

eliminate the need for these vehicles is that the bench test components be installed instead on the durability data vehicle (DDV).

In the Interim Final Rule which EPA published on October 13, 1981, section 86.084-26(a)(4)(iii) allows manufacturers to alter the durability data vehicle configuration at selected test points to represent emission data vehicles; to perform emissions tests on the altered vehicle and then to return the vehicle to the durability data vehicle configuration and continue mileage accumulation.

Our proposal is that each of the three sets of bench test components would be installed on the DDV before the 5,000 mile emission test is due to be performed but after evaporative background emissions and exhaust emissions have stabilized. The vehicle would be subjected to exhaust emission and SHED tests with each set of components installed then it would be returned to the DDV configuration and mileage accumulation would continue until 50,000 miles is achieved and a satisfactory deterioration factor is calculated for each regulated exhaust emission. During this time the bench testing would also have been completed and the three sets of components would be ready to receive their 50,000 miles-equivalent test. These components would then be installed on the vehicle and exhaust emission and SHED tests performed for each set.

While we understand that there might be some concern about the "stability" of the vehicle from the evaporative emission viewpoint when used in this manner because of the deterioration taking place due to the useful life testing, we believe that the test results will be prejudiced towards a "worst-case" evaluation of the bench test components and that this proposal might therefore be acceptable to the EPA.

We would appreciate your earliest consideration of this proposal. If you have any questions please call me.

Yours truly,

AMERICAN HONDA MOTOR CO., INC.

Brian Gill
Manager
Certification Department

BG:lw

APR 12 1983

Mr. Brian Gill, Manager
Certification Department
American Honda Motor Co., Inc.
P.O. Box 50
100 West Alondra Blvd.
Gardena, CA 90247

Dear Mr. Gill:

We are responding to your letter of March 28, 1983, requesting elimination of building test vehicles which are only used for evaporative emission testing of bench test components. We approve your proposal providing that California configured or 50-state configured durability requirements.

Sincerely,

K. D. Drachand, Chief
Mobile Source Control Division